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## In the Claims

Please amend the claims by replacing all prior versions of the claims pursuant to 37 C.F.R. §1.121 as indicated below.

- 109. (Previously presented) A process for producing a cotton plant wherein the fatty acid of the seed oil of the plant comprises 58.5% oleic acid, the process comprising the step of introducing into a cotton plant a gene construct encoding a ribonucleotide molecule which reduces expression of the endogenous cotton ghFAD2-1 gene in the seed of the cotton plant, thereby producing the cotton plant.
- 110. (Previously presented) The process of claim 109, wherein the fatty acid of the seed oil comprises 66% oleic acid.
- 111. (Previously presented) The process of claim 110, wherein the fatty acid of the seed oil comprises 68.9% oleic acid.
- 112. (Previously presented) The process of claim 109, wherein the seed oil has a decreased palmitic acid content relative to the seed oil from an isogenic non-transformed plant.
- 113. (Previously presented) The process of claim 109, wherein the ribonucleotide molecule comprises nucleotides encoded by a sequence, in the sense or antisense orientation, selected from the group consisting of:
  - (A) the nucleotide sequence set forth in SEQ ID NO: 3 or SEQ ID NO: 7; and
  - (B) a nucleotide sequence which encodes the amino acid sequence set forth in SEQ ID NO: 4.

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114. (Currently Amended) The process of claim 109, wherein the ribonucleotide molecule comprises an inverted repeat comprising nucleotides having a sequence corresponding to at least 25 a sequence of nucleotides of the endogenous cotton ghFAD2-1 gene transcript linked to nucleotides having a sequence which is complementary to the sequence of the at least 25 nucleotides.

- 115. (Currently Amended) The process according to claim 114, wherein the at least 25 sequence of nucleotides are is from the 5'-untranslated region of SEQ ID NO: 3.
- 116. (Currently Amended) The process of claim 114, wherein the at least 25 sequence of nucleotides are is from the 5'-untranslated region of the ghFAD2-1 gene set forth in SEQ ID NO: 7.
- 117. (Previously presented) The process of claim 109, wherein the gene construct comprises a promoter selected from the group consisting of the soybean lectin promoter sequence and the ghFAD2-1 gene promoter.
- 118. (Previously presented) A transgenic cotton plant produced by the process of claim 109 comprising a gene construct encoding a ribonucleotide molecule which reduces expression of the endogenous cotton ghFAD2-1 gene in the seed of the cotton plant.
- 119. (Previously presented) A transgenic cotton plant wherein the fatty acid of the seed oil of the plant comprises 58.5% oleic acid.

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120. (Previously presented) The transgenic cotton plant of claim 119, wherein the fatty acid of the seed oil comprises 66.0% oleic acid.

- 121. (Previously presented) The transgenic cotton plant of claim 120, wherein the fatty acid of the seed oil comprises 68.9% oleic acid.
- 122. (Previously presented) The transgenic cotton plant of claim 119, wherein the seed oil has a decreased palmitic acid content relative to the seed oil from an isogenic non-transformed plant.
- 123. (Previously presented) A transgenic cotton seed of the plant of claim 118.
- 124. (Previously presented) A transgenic cotton seed of the plant of claim 119.
- 125. (Previously presented) A transgenic cotton seed of the plant of claim 120.
- 126. (Previously presented) A transgenic cotton seed of the plant of claim 122.
- 127-130. (Canceled)
- 131. (Previously presented) A process for producing cotton seed oil wherein the fatty acid of the oil comprises 58.5% oleic acid, the process comprising the steps of:
  - (A) obtaining a transgenic cotton plant comprising a gene construct encoding a ribonucleotide molecule which reduces expression of the endogenous cotton ghFAD2-1

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gene in the seed of the cotton plant; and

- (B) growing the transgenic cotton plant for a time and under conditions sufficient for the production of cotton seed by the cotton plant, wherein the fatty acid of the oil of the cotton seed comprises 58.5% oleic acid; and
- (C) extracting the oil from the cotton seed, thereby producing the cotton seed oil.
- 132. (Previously presented) The process of claim 131, wherein the fatty acid of the cotton seed oil comprises 66% oleic acid.
- 133. (Previously presented) The process of claim 132, wherein the fatty acid of the cotton seed oil comprises 68.9% oleic acid.
- 134. (Previously presented) The process of claim 131, wherein the cotton seed oil has a decreased palmitic acid content relative to seed oil from an isogenic non-transformed plant.
- 135. (Previously presented) The process of claim 131, wherein the ribonucleotide molecule comprises nucleotides, encoded by a sequence, in the sense or antisense orientation, selected from the group consisting of:
  - (A) the nucleotide sequence set forth in SEQ ID NO: 3 or SEQ ID NO: 7; and
  - (B) a nucleotide sequence which encodes the amino acid sequence set forth in SEQ ID NO: 4.

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136. (Currently Amended) The process of claim 131, wherein the ribonucleotide molecule comprises an inverted repeat comprising nucleotides having a sequence corresponding to at least 25 a sequence of nucleotides of the endogenous cotton ghFAD2-1 gene transcript linked to nucleotides having a sequence which is complementary to the sequence of the at least 25 nucleotides.

- 137. (Currently Amended) The process according to claim 136, wherein the at least 25 sequence of nucleotides are is from the 5'-untranslated region of SEQ ID NO: 3.
- 138. (Currently Amended) The process of claim 136, wherein the at least 25 sequence of nucleotides are is from the 5'-untranslated region of the ghFAD2-1 gene set forth in SEQ ID NO: 7.
- 139. (Previously presented) The process of claim 131, wherein the gene construct comprises a promoter selected from the group consisting of the soybean lectin promoter sequence and the ghFAD2-1 gene promoter.

## 140-143. (Canceled)

- 144. (Currently Amended) A gene construct for increasing the oleic acid content of cottonseed oil, comprising nucleotides having a sequence encoding a ribonucleotide molecule which reduces expression of the endogenous cotton ghFAD2-1 gene in the seed of the cotton plant, wherein the sequence is selected from the group consisting of:
  - (A) an inverted repeat sequence comprising a sequence of at least 25 nucleotides from the 5'-untranslated region of SEQ ID NO: 3 linked to a nucleotide sequence

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which is complementary to the sequence of at least 25 nucleotides; and

- an inverted repeat sequence comprising a sequence of (B) at least 25 nucleotides from the 5'-untranslated region of the ghFAD2-1 gene set forth in SEQ ID NO: 7 linked to a nucleotide sequence which is complementary to the sequence of at least 25 nucleotides.
- 145. (Previously presented) The gene construct of claim 144, comprising a promoter sequence selected from the group consisting of a soybean lectin gene promoter sequence and the ghFAD2-1 gene promoter.
- 146. (Currently Amended) The gene construct of claim 144, inverted repeat sequence comprises wherein the intervening sequence between the sequence of at least 25 nucleotides and the sequence complementary thereto.